## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:

Source:

Date Processed by STIC:

ENTERED



## **IFWO**

RAW SEQUENCE LISTING DATE: 05/31/2005 PATENT APPLICATION: US/10/828,837 TIME: 13:50:23

```
4 <110> APPLICANT: ADVANCED RESEARCH AND TECHNOLOGY INSTITUTE, INC.
              RICHARD, GREGORY L
              CATT, DIANA M
      6
      8 <120> TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR PROMOTING ORAL HEALTH, AND
              POLYPEPTIDES USEFUL FOR SAME
     11 <130> FILE REFERENCE: IU-104
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/828,837
C--> 13 <141> CURRENT FILING DATE: 2004-04-21
     13 <150> PRIOR APPLICATION NUMBER: 10/009,004
     14 <151> PRIOR FILING DATE: 2001-11-05
     16 <150> PRIOR APPLICATION NUMBER: 60/132,312
     17 <151> PRIOR FILING DATE: 1999-05-03
     19 <150> PRIOR APPLICATION NUMBER: PCT/US00/11992
     20 <151> PRIOR FILING DATE: 2000-05-03
     22 <160> NUMBER OF SEQ ID NOS: 8
     24 <170> SOFTWARE: PatentIn version 3.3
     26 <210> SEQ ID NO: 1
     27 <211> LENGTH: 11
     28 <212> TYPE: PRT
     29 <213> ORGANISM: Streptococcus mutans
     31 <400> SEQUENCE: 1
     33 Met Ser Ser Gln Ala Lys Ala Asn Asn Ile Pro
     34 1
     37 <210> SEQ ID NO: 2
     38 <211> LENGTH: 11
     39 <212> TYPE: PRT
     40 <213> ORGANISM: Streptococcus mutans
     43 <220> FEATURE:
     44 <221> NAME/KEY: UNSURE
     45 <222> LOCATION: (8)...(8)
     47 <400> SEQUENCE: 2
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     50 1
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     54 <211> LENGTH: 11
     55 <212> TYPE: PRT
     56 <213> ORGANISM: Streptococcus mutans
     58 <400> SEQUENCE: 3
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     64 <210> SEQ ID NO: 4
     65 <211> LENGTH: 11
     66 <212> TYPE: PRT
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RAW SEQUENCE LISTING DATE: 05/31/2005
PATENT APPLICATION: US/10/828,837 TIME: 13:50:23

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71 Met Gln Ser Pro Thr Glu Phe Asn Glu Asp Lys
75 <210> SEQ ID NO: 5
76 <211> LENGTH: 2025
77 <212> TYPE: DNA
78 <213> ORGANISM: Streptococcus mutans
81 <220> FEATURE:
82 <221> NAME/KEY: CDS
83 <222> LOCATION: (96)..(1103)
85 <400> SEQUENCE: 5
86 atagtaaaaa tttttcaaaa aatatattac gtaagtattg ctaaatattt cttttgtgtt
88 tcaatatagg tgaaaaaaga aaatgaagga agatt atg aat caa aaa ata gtc
                                                                         113
89
                                          Met Asn Gln Lys Ile Val
90
92 gtc att tcg tca ttt tac atg tta ggt gct cat tca ttt tca aag gca
                                                                         161
93 Val Ile Ser Ser Phe Tyr Met Leu Gly Ala His Ser Phe Ser Lys Ala
                                   15
96 gta tat cat aat gat agg agt gtg aaa ctt atg aaa aga att gat att
                                                                         209
97 Val Tyr His Asn Asp Arg Ser Val Lys Leu Met Lys Arg Ile Asp Ile
                               30
100 aat cat caa gca caa cgt ttt tct att cgt aaa tat gca ttt gga gct
                                                                          257
101 Asn His Gln Ala Gln Arg Phe Ser Ile Arg Lys Tyr Ala Phe Gly Ala
104 gca tct gtt tta att ggc tgt gtc ttt ttt cta ggt acc caa aat gtt
                                                                          305
105 Ala Ser Val Leu Ile Gly Cys Val Phe Phe Leu Gly Thr Gln Asn Val
108 tct gca caa gag cag gga act caa ttg cca gca agt gaa aac gca gtt
                                                                          353
109 Ser Ala Gln Glu Gln Gly Thr Gln Leu Pro Ala Ser Glu Asn Ala Val
110
                    75
                                         80
112 gtg aac gtg gct gaa aat tca gtt gct atc agc caa gca gtt gca gat
                                                                          401
113 Val Asn Val Ala Glu Asn Ser Val Ala Ile Ser Gln Ala Val Ala Asp
                                                                          449
116 aag gca gca act caa aca act cta aca gaa aca ccc caa gtt gaa gtt
117 Lys Ala Ala Thr Gln Thr Thr Leu Thr Glu Thr Pro Gln Val Glu Val
            105
                                110
                                                                          497
120 gag gag aaa gaa agt aag gta aat gct cct gct tta aat gtc gat gac
121 Glu Glu Lys Glu Ser Lys Val Asn Ala Pro Ala Leu Asn Val Asp Asp
       120
124 aaa ggt gca aaa tcc aaa gaa gat gtg aac cct act att tca aag aca
                                                                          545
125 Lys Gly Ala Lys Ser Lys Glu Asp Val Asn Pro Thr Ile Ser Lys Thr
128 gca agt gaa gtg gaa gct tct gca gta act gct act gat act aaa aat
                                                                          593
129 Ala Ser Glu Val Glu Ala Ser Ala Val Thr Ala Thr Asp Thr Lys Asn
                    155
                                        160
132 tca aat cca caa gtc aat gtt gaa act gac tca agt gaa aaa gac gaa
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133 Ser Asn Pro Gln Val Asn Val Glu Thr Asp Ser Ser Glu Lys Asp Glu
134
                170
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RAW SEQUENCE LISTING DATE: 05/31/2005
PATENT APPLICATION: US/10/828,837 TIME: 13:50:23

136	aat	222	ata	ata	300	toa	act	cca	act	224	~~~	2.0±	~~~	~~~	~~~	000	68	۵
	Asn																00	9
138	ASII	цуз	185	Vai	1111	Jer	лта	190	лта	цуз	Giu	1111	195	лта	GIU	GIII		•
	aat	aaa		aca	atc	202	~ = =		ctt	ata	C22	202		act	224	act	73	7
	Asn																73	′
142	ASII	200	пуз	лта	Val	Ary	205	HOII	пец	nec	GIII	210	GTII	nra	пÃЭ	ATG		
	gtc		a++	cca	toa	C22		22+	+ > +	a++	++~		~~~	202	2.0±	cot	78	5
	Val																70	5
	215	Ser	116	110	267	220	GIY	ASII	ıyı	vaı	225	GIII	GIU	1111	1111	230		
	gta	222	aa+	aca	acc		ata	tcc	200	CCP		C22	+++	220	+++		83	2
	Val																03	,
150	, 44	-,0	11011		235	DCI	1100	001	DCI	240	1111	OIII	1110	71011	245	710p		
	aaa	gga	gat	aaα		+++	tat	gat	aat		tta	gaa	aca	gat		cat	88	1
	Lys																00	_
154	-7-	1		250			-1-		255			0_0		260	01,			
	caa	taa	att		tat	ata	tct	tac		aat.	att	cat	cac		act	cct	92	9
	Gln																72	_
158			265		-1-			270		1		5	275	- ] -				
	att	act		aca	att	gaa	gaa		aaσ	caa	aaa	αaa		att	cag	caa	97	7
	Ile																	
162		280					285		-		-	290						
164	aat	tta	ccg	gca	caa	gga	acc	tat	cac	ttt	act	aaa	caq	caq	aqc	tta	102	5
	Asn																	
166	295					300		_			305	-				310		
168	aaa	atg	aag	cta	aac	tgt	cta	gtc	cga	ccc	aat	tct	cgt	ttt	aca	acg	107	3
169	Lys	Met	Lys	Leu	Asn	Cys	Leu	Val	Arg	Pro	Asn	Ser	Arg	Phe	Thr	Thr		
170					315					320					325			
172	gag	atc	acg	ttt	ttt	atg	ata	agg	ttt	tag	aago	cggat	tgg a	acato	caat	gg	112	3
	Glu	Ile	Thr		Phe	Met	Ile	Arg	Phe									
174				330					335									
		_	_	_		_		_	_	_	_			-	_	acgaca	118	
																acggct	124	
																gtatta	130	
																atcaaa	136	
																agcggt	142	
																ggggca	148	
		_	_			-	_	_	-	_			-		-	attgcc	154	
				_		_	_	_			_		_		_	gacata	160	
																ggtat	166	
194	caag	caac	cta a	acaa	aggc	ga ac	ggcgt	ctat	aaq	ggtgg	gccg	ttaa	aggto	cag t	gaco	cataaa	172	
	_										_	_			_	taaag	178	
																cacaag	184 190	
																gtccaa ctgatg	196	
		_						_			_	_		-	_	tggtt:	202	
204	_	ccac	icy (	jaile	ageta	יר כנ	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Lace	ı gıç	yyıal	Lug	ccgi	Lati	all c	accal	Lugger	202	
	<210	> < =	יט דר	י אורי													202	J
	<211																	
	<212				, ,													
-11	~~	- 11		11/1														

RAW SEQUENCE LISTING DATE: 05/31/2005 PATENT APPLICATION: US/10/828,837 TIME: 13:50:23

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212 <213> ORGANISM: Streptococcus mutans
214 <400> SEQUENCE: 6
216 Met Asn Gln Lys Ile Val Val Ile Ser Ser Phe Tyr Met Leu Gly Ala
220 His Ser Phe Ser Lys Ala Val Tyr His Asn Asp Arg Ser Val Lys Leu
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                                    25
224 Met Lys Arg Ile Asp Ile Asn His Gln Ala Gln Arg Phe Ser Ile Arg
                               40
228 Lys Tyr Ala Phe Gly Ala Ala Ser Val Leu Ile Gly Cys Val Phe Phe
232 Leu Gly Thr Gln Asn Val Ser Ala Gln Glu Gln Gly Thr Gln Leu Pro
233 65
                                           75
236 Ala Ser Glu Asn Ala Val Val Asn Val Ala Glu Asn Ser Val Ala Ile
237
240 Ser Gln Ala Val Ala Asp Lys Ala Ala Thr Gln Thr Thr Leu Thr Glu
               100
                                    105
244 Thr Pro Gln Val Glu Val Glu Lys Glu Ser Lys Val Asn Ala Pro
                                120
248 Ala Leu Asn Val Asp Asp Lys Gly Ala Lys Ser Lys Glu Asp Val Asn
                           135
252 Pro Thr Ile Ser Lys Thr Ala Ser Glu Val Glu Ala Ser Ala Val Thr
                       150
                                           155
256 Ala Thr Asp Thr Lys Asn Ser Asn Pro Gln Val Asn Val Glu Thr Asp
                   165
                                       170
260 Ser Ser Glu Lys Asp Glu Asn Lys Met Val Thr Ser Ala Pro Ala Lys
               180
                                   185
264 Glu Thr Glu Ala Glu Gln Asn Glu Lys Ala Val Arg Glu Asn Leu Met
           195
                                200
268 Gln Arg Gln Ala Lys Ala Val Ser Ile Pro Ser Gln Gly Asn Tyr Val
                            215
272 Phe Gln Glu Thr Thr Pro Val Lys Asn Ala Ala Ser Met Ser Ser Pro
                       230
                                           235
276 Thr Gln Phe Asn Phe Asp Lys Gly Asp Lys Val Phe Tyr Asp Asn Val
                   245
                                       250
280 Leu Glu Ala Asp Gly His Gln Trp Ile Ser Tyr Val Ser Tyr Ser Gly
                                    265
               260
284 Ile Arg Arg Tyr Ala Pro Ile Ala Val Thr Ile Glu Glu Leu Lys Gln
     275
                                280
288 Lys Glu Ile Val Gln Gln Asn Leu Pro Ala Gln Gly Thr Tyr His Phe
                           295
      290
                                                300
292 Thr Lys Gln Gln Ser Leu Lys Met Lys Leu Asn Cys Leu Val Arg Pro
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296 Asn Ser Arg Phe Thr Thr Glu Ile Thr Phe Phe Met Ile Arg Phe
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300 <210> SEO ID NO: 7
301 <211> LENGTH: 1836
302 <212> TYPE: DNA
303 <213> ORGANISM: Streptococcus mutans
306 <220> FEATURE:
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RAW SEQUENCE LISTING DATE: 05/31/2005
PATENT APPLICATION: US/10/828,837 TIME: 13:50:23

308	<222	2> LO	CAT:	KEY: ION: NCE:	(1)	(18	336)										
311	atg Met	aaa	aga	att	gat			cat His									48
316 317	Lys	Tyr	Āla	Phe 20	Gly	Āla	Āla	tct Ser	Val 25	Leu	Ile	Gly	Cys	Val 30	Phe	Phe	96
								gca Ala 40									144
								aac Asn									192
	Ser		-	_		_	_	gca Ala	_	_						_	240
								gag Glu									288
								ggt Gly									336
								agt Ser 120									384
								aat Asn									432
348								aaa Lys									480
								gag Glu									528
								tca Ser									576
								aaa Lys 200									624
363								gga Gly					tat				672
367 368		gaa					caa	tgg Trp				gtg					720
		cgt	cgc	tat	gct		att	gct	gtg	aca		gaa	gaa	ttg	aag		768

RAW SEQUENCE LISTING ERROR SUMMARY

PATENT APPLICATION: US/10/828,837

DATE: 05/31/2005 TIME: 13:50:24

Input Set : A:\Seq List 10-828837.txt
Output Set: N:\CRF4\05312005\J828837.raw

## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; Xaa Pos. 8 p

VERIFICATION SUMMARY

3 4

DATE: 05/31/2005

PATENT APPLICATION: US/10/828,837

TIME: 13:50:24

Input Set : A:\Seq List 10-828837.txt Output Set: N:\CRF4\05312005\J828837.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:49 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:2 L:49 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0